

REMARKS

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1, 4-16, 19-25, 27-36, 38-46 are pending in the application.

The claims are rejected under 35 U.S.C. 103(a) over *Hsu* and the other teaching references for essentially the same reasons detailed in the previous Office Action. Applicants respectfully traverse the rejections for the reasons presented in the previous Amendment, at pages 14-18. The previous traversing arguments are incorporated by reference herein.

The Examiner's Response to Arguments in pages 2-4 of the Final Office Action is noted. Applicants respectfully disagree with at least points 2-3 of the Examiner's Response.

With respect to point 2 regarding **independent claim 1**, it is acknowledged that *Hsu* discloses a shared mode and a dedicated mode.¹ The reference also discloses switching from the shared mode to the dedicated mode² and *vice versa*.³ The Examiner's reliance on paragraph 0053 of *Hsu* is further noted. Basically, the Examiner argues that, in the shared mode or channel, there is inherently a ratio between different services, presumably, BCMCS and 1xEV-DO/DV. Assuming *arguendo* that the Examiner is correct, the reference still lacks the last paragraph of claim 1, i.e.,

“in the mixed BCMCS mode, the 1xEV-DO ANC is configured for controlling a ratio of (i) a first portion of frequency capacity of the specific 1xEV-DO FA allocated to the BCMCS to (ii) a second portion of frequency capacity of the specific 1xEV-DO FA allocated to the 1xEV-DO in accordance with the BCMCS assignment ratio.”

¹ See *Hsu* at paragraph 0079.

² *Id* at FIG. 11 and the corresponding text.

³ *Id* at FIG. 10 and the corresponding text.

It should be noted that the claimed “BCMCS assignment ratio” highlighted above is also transmitted from a base station manager (BSM) to the 1xEV-DO access network controller (ANC) as part of BCMCS control information, as recited in the following paragraph of claim 1

a base station manager (BSM) for receiving BCMCS control information containing the FA mode and/or the BCMCS assignment ratio and transmitting a received BCMCS control information to a 1xEV-DO access network controller (ANC); and

Thus, claim 1 requires that the 1xEV v. BCMCS ratio be (i) controlled by the ANC (ii) in accordance with a BCMCS assignment ratio (iii) transmitted to the ANC from a BSM.

However, the “inherent ratio” relied on by the Examiner is not disclosed or suggested by *Hsu* to be at all controlled as required by claim feature (i). At the very least, the cited paragraph 0053 of *Hsu* does not disclose or suggest any manner for controlling such “inherent ratio.” The Examiner has also failed to specify with reasonable clarity as to how the claimed controlling can be found or suggested in *Hsu*.⁴

The entire disclosure of *Hsu* also falls short of teaching or proposing the claimed feature (ii). The most relevant part of *Hsu*, as noted above, includes FIGs. 10-11 and the corresponding text from paragraphs 0073 to paragraph 0083. While *Hsu* discloses in FIG. 10 and paragraph 0075 how the dedicated mode is changed to the shared mode, the reference does not specify *why* such switching is made. Therefore, it is unreasonable to conclude that the *Hsu* dedicated mode to shared mode switch is for the purpose of controlling any “inherent ratio” that *Hsu* might have disclosed. The reverse switch from the shared mode to the dedicated mode as disclosed in FIG. 11 and paragraphs 0076-0078 of *Hsu* is also unrelated to the claim feature at issue, because the reference, again, does not specify *why* such switching is made. *Hsu* refers to two big gray boxes in FIGs. 10-11 as where the determinations to switch modes are made, without detailing any criteria for such determinations. There is no *enabling* disclosure in *Hsu* that might teach the claim feature (ii).

⁴ See Final Office Action at page 6, the first full paragraph.

Applicants further note paragraph 0081 relied on heavily by the Examiner. This paragraph, as further explained by paragraph 0080, discloses how a mobile station wishing to receive BCMCS service can be switched to the dedicated mode. The Applicants note, however, that the claim feature at issue is about the mixed or shared mode. Accordingly, the teaching in paragraph 0081 of *Hsu* is irrelevant to the last paragraph of claim 1.

Having pointed out why *Hsu* lacks claim features (i) and (ii), Applicants will now proceed to discuss why the reference, as applied in the Office Action, also lacks the claim feature (iii). Basically, the Examiner is of the opinion that claim feature (iii) is met by *Hsu*'s FIG. 1 and paragraphs 0045, 0053 and 0074. Applicants have carefully reviewed the cited portions, as well as the whole disclosure of *Hsu*, but failed to locate any teaching that could be reasonably interpreted as a transmission of a BCMCS assignment ratio from *Hsu*'s element 22 (which the Examiner regarded as the claimed BSM)⁵ to element 18 (which the Examiner regarded as the claimed ANC)⁶.

For example, the cited paragraph 0045 reproduced below merely discloses the connection between elements 22 and 18. No transmission of any BCMCS assignment ratio is disclosed.

[0045] A network part of the communication system includes a base transceiver station (BTS) 18. Both the base transceiver station and the mobile station form radio transceivers capable of transducing radio signals therebetween by way of radio channels defined upon the forward and reverse links 14 and 16. The base transceiver station forms part of a radio access network portion of the network part of the communication system. And, the radio access network part of the communication system is here shown further to include a base station controller (BSC) 22 and point control function (PCF) and a packet data service node (PDSN) 24. The BSC is coupled between the base transceiver station and the PDSN.

Further, the cited paragraph 0053 reproduced below discloses how apparatus 34 in FIG. 1 of *Hsu* operates. Connection and/or transmission between elements 18 and 22 are not mentioned at all.

⁵ *Id* at page 16, line 7.

⁶ *Id* at page 16, line 9.

[0053] FIG. 2 illustrates an exemplary flexible transport channel structure, shown generally at 64, defined pursuant to an embodiment of the present invention and pursuant to which the apparatus 34, shown in FIG. 1, operates. The channel structure includes a physical layer, here in the exemplary implementation, a 1xEV-DV physical layer 66 and a 1xRTT physical layer 68, as defined in the CDMA 2000 operating specification, or proposed variant thereof. The 1xEV-DV physical layer defines an MBS (multicast and broadcast service) channel 72 and a data channel 74 upon which to communicate, respectively, MBS data and voice and other data. Analogously, the 1xRTT physical layer 68 defines both an MBS channel 76 and a data channel 78. Data to effectuate MBS and data/voice services, respectively, is communicated upon the respective channels to be delivered to the mobile station, here to be delivered in a multiplexed or QoS (quality of service)-dependent manner, indicated by the block 82. And, thereafter, the data of the associated services are provided to an MBS layer 84 or in another services layer 86 thereby. And as indicated by the segments 88, data delivered by way of the channels defined by either of the physical layers 66 and 68 are provided to the appropriate layer 84 or 86. Because channels defined, selectively, upon both of the 1xEV-DV and 1xRTT physical layers are utilized to effectuate communication services, improved capacity, and flexibility, of communications are permitted. And, here, the 1xEV-DV, forward-shared packet-data channel is shared by high-speed packet data users based upon code or time multiplexing. The channel is used here also for MBS information delivery.

Finally, the cited paragraph 0074 reproduced below discloses partially how the dedicated mode to shared mode switch is effectuated by element 18. It concerns the communication between *Hsu*'s element 18 and mobile stations 12-1 through 121-n.⁷ However, such communication is neither indicated nor suggestive of any communication between elements 18 and 22.

[0074] Initially, and as indicated by the segments 224, 226, and 228, dedicated-mode BCMCS communications are effectuated by the base transceiver station 18 with individual ones of the mobile stations 12-1 through 12-n.

In summary, Applicants respectfully submit that *Hsu* fails to teach or suggest the claim features (i)-(iii) at issue. While the reference's shared mode might include some ratio, such ratio is not at all controlled. If the reference's shared-to-dedicated and *vice versa* switching is interpreted as a way of controlling the "ratio," such "controlling" is not performed in accordance with any assignment ratio transmitted to the "ANC" 18 from a "BSM" 22. As noted above, the reference does not include an *enabling* disclosure of *why* the shared-to-dedicated and *vice versa* switching

⁷ See *Hsu* at FIG. 1.

should be made. Switching back and forth between shared and dedicated modes is neither indicative nor suggestive of the claimed controlling which is done in accordance with an assignment ratio transmitted to the ANC from a BSM. In addition, the communication between the *Hsu* “ANC” 18 and “BSM” 22 is neither disclosed, taught nor suggested to include an assignment ratio for the purpose of controlling or switching mode.

Accordingly, Applicants respectfully submit that the rejection of independent claim 1 is improper and should be withdrawn.

With respect to point 3 regarding **independent claim 42**, Applicants note the Examiner’s main point that *Hsu* uses multiple channels to improve capacity and/or flexibility. Assuming *arguendo* that the Examiner is correct, the rejection is still unsustainable for the following reasons.

First, *Hsu* discloses no more than a general use of multiple channels to transmit data using multiple protocols/techniques. The reference, as applied in the Office Action, however, does not teach or suggest the specific way of switching an access terminal from one FA to another⁸ as recited in independent claim 42, the last four paragraphs. Paragraphs 0048, 0053 cited by the Examiner⁹ do not at all mention any switching. Paragraph 0081 also cited by the Examiner in the same section of the Final Office Action discloses how to switch a mobile stations from one mode to another.¹⁰ Applicants respectfully submit that the reference’s mode switching is not readable on the claimed FA switching.

Second, as noted above and before, the most relevant teaching of *Hsu* is in paragraph 0081 which merely discloses that a mobile station can be switched to the dedicated mode to join BCMCS. The claim is directed, however, to the shared/mixed mode.

⁸ I.e., from the specific 1xEV-DO FA to another 1xEV-DO FA.

⁹ See Final Office Action at page 4, the full paragraph.

¹⁰ *Hsu* at paragraph 0081, line 4 from bottom.

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Finally, the reference of *Hsu* fails to teach or suggest any assignment ratio as well its transmission and control as discussed above with respect to claim 1.

Accordingly, Applicants respectfully submit that the rejection of independent claim 42 is improper and should be withdrawn.

The dependent claims are considered patentable at least for the reason(s) advanced with respect to the respective independent claim(s).

Accordingly, all claims in the present application are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,
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